## (12)

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## (54) Liquid ring pump with rotating liner

(57) Liquid ring pumps with rotating canisters are supported by at least one radial fluid bearing pad. The bearing fluid is either a gas or a liquid. The radial fluid bearing pads can be of either the hydrodynamic or hydrostatic type. Holes in each bearing pad are used to introduce bearing fluid to the clearance between the ro-

tating canister and the housing of the pump. Each radial bearing pad can be mounted to the housing using a ball joint or a bladder. Access ports formed in the housing provide access to the radial bearing pads. Axial fluid bearings are mounted to the housing using shims or threaded bolts so that the axial position of the axial bearings can be adjusted.

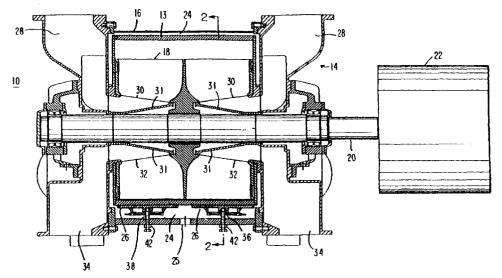


FIG. I



## **EUROPEAN SEARCH REPORT**

Application Number EP 96 30 6886

Category	Citation of document with indication of relevant passages	n, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
D,A	US 5 370 502 A (HAAVIK) * column 1, line 10 - co figures 1-4 *		1	F04C19/00
				TECHNICAL FIELDS SEARCHED (Int.CL.6) F04C F01C
	The present search report has been draw	vn up for all claims		
Place of search		Date of completion of the search		
THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure		E : earlier patent do after the filing d D : document cited f L : document cited f	May 1997  T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons  &: member of the same patent family, corresponding	